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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,893	02/24/2004	Jan Jaap Kuit	081468-0308381	9997
909	7590	12/30/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			MATHEWS, ALAN A	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2851	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/784,893	KUIT, JAN JAAP	
	Examiner	Art Unit	
	Alan A. Mathews	2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13 and 15-24 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 7-11, 13, 15, 18, 20 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable Akimoto et al. (U. S. Patent No. 5,844,662) in view of Imai (U. S. Patent No. 6,737,207). Akimoto et al. discloses in **figure 6** and column 2, lines 6—69, and column 3, lines 1-16, an exposure processing section (lithographic apparatus) 20. A track 10 comprises one or more processing devices 14-18. A loader/unloader section 40 including the convey mechanism 41 is the transport system, outside the lithographic apparatus 20 and outside track 10, configured to transport the substrate along an elongate (arrow X looks elongated) transporter pathway between the track 10 and the lithographic apparatus 20. **It is even noted that figure 6 in Akimoto et al. looks strikingly similar to Applicant's figure 5 in the instant application.** It is also noted that Akimoto et al. discloses, in another embodiment shown in figure 1, a transporter 50 and 51 which is outside the lithographic apparatus 20 and track 10. With respect to claims 7 and 18, Akimoto et al. discloses an additional track 30 (i.e. a plurality of tracks 10 and 30). With respect to claim 13, column 3, line 15, discloses a belt. Thus, Akimoto et al

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discloses the invention except for specifically disclosing the well-known details of the stepper in the lithographic apparatus 20. Imai discloses in figures 1 and 2, the well-known details of a stepper (exposure apparatus) 50. The stepper 50 has a track 52 to transport the wafer W1 to one or more processing devices 54-59. Imai discloses in figures 1, 2, and column 11, lines 11-67, and columns 12 and 13, an illuminator including elements 1, 2, and 3, a support structure 31 to hold a patterning device (reticule) R, and a substrate table 39 to hold a substrate W. Element PL is the projection system. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide Akimoto with a stepper that has an illuminator, a support structure configured to hold a patterning device, a substrate table, and a projection system in view of Imai for the purpose of providing a complete system and thus improving efficiency.

3. Claims 6, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (U. S. Patent No. 5,844,662) in view of Imai (U. S. Patent No. 6,737,207). as applied to claims 1 and 15 above, and further in view of Ohtani et al. (U. S. Patent No. 5,963,753). The modified device of Akimoto et al. and Imai disclose the invention except for disclosing a plurality of lithographic apparatuses. Ohtani et al. discloses in figure 4 the use of a plurality of exposure apparatuses 2a and 2b for the purpose of improved productivity. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the modified device of Akimoto et al. and Imai with a plurality of lithographic apparatus in view of Ohtani et al. for the purpose of providing improved productivity and a higher throughput.

4. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (U. S. Patent No. 5,844,662) in view of Imai (U. S. Patent No. 6,737,207) as applied to claims 1 and 15 above, and further in view of WU (U. S. Patent No. 5,399,531). The modified device of Akimoto et al. and Imai disclose the invention except for the transport system comprising its own minienvironment. Wu discloses in the Abstract and column 5, lines 42-44, branched tunnels for wafer transportation with a controlled environment for the work stations 20 and means for maintaining a clean environment in the branched tunnel. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to the modified device of Akimoto et al. and Imai with a transport system having its own minienvironment in view of Wu for the purpose of reducing defects and thus producing a better final product.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akimoto et al. (U. S. Patent No. 5,844,662) in view of Imai (U. S. Patent No. 6,737,207) as applied to claims 1 and 11 above, and further in view of Hirata et al. (U. S. Patent No. 6,604,624). The modified device of Akimoto et al. and Imai disclose the invention except for the linear guide being one of a roller bearing guide and a gas-bearing guide. Hirata et al. discloses in figures 4 and 7 and column 9, lines 63-67, a roller bearing 42a and 42b for a guide rail for transporting semiconductor devices. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide the modified device of Akimoto et al. and Imai

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with a roller bearing in view of Hirata et al. for the purpose of easier transportation of the substrates.

Allowable Subject Matter

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for the indicated allowability of claim 4 is as follows:

The prior art does not disclose or suggest a transport system comprising at least two transporter pathways, one configured to transport the substrate from the track to the lithographic apparatus and one configured to transport the substrate from the lithographic apparatus to the track in combination with all the other elements recited in independent claim 1.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan A. Mathews
Primary Examiner
Art Unit 2851

AM